

FORM PTO-1449
(Rev. 2-32)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
99A209SERIAL NO.
09/583,599INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

APPLICANT

WANG et al.

FILING DATE

May 31, 2000

GROUP

Not Yet Known



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
tt	1.	3 267 010	8/66	Creutz et al.			
	2.	3 328 273	6/67	Creutz et al.			
	3.	3 715 289	2/73	Cope, Jr.			
	4.	4 038 161	7/77	Eckles et al.			
	5.	4 134 803	1/79	Eckles et al.			
	6.	4 324 623	4/82	Schaer			
	7.	4 376 685	3/83	Watson			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

tt	8.		"Copper Electroplating for Advanced Interconnect Technology", R.D. Mikkola, Q.-T. Jiang & B. Carpenter, PLATING & SURFACE FINISHING, March 2000, pp. 81-85					
	9.		"Leveling of 200 nm Features by Organic Additives", James J. Kelly and Alan C. West, ELECTROCHEMICAL AND SOLID-STATE LETTERS, 2 (11) (1999), LETTERS ONLINE, Kell1-Kell3					

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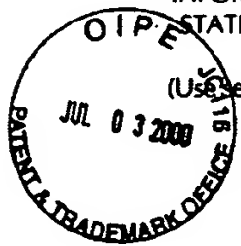
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tl	10.	4 430 173	2/84	Boudot et al.			
	11.	4 490 220	12/84	Houman			
	12.	4 555 315	11/85	Barbieri et al.			
	13.	4 897 165	1/90	Bernards et al.			
	14.	4 954 226	9/90	Mahmoud			
	15.	4 717 439	1/88	Hajdu et al.			
	16.	4 786 746	11/88	Miljkovic			
	17.	4 948 474	8/90	Miljkovic			

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tl	18.		"Polyethylene Glycol in Copper Electrodeposition onto a Rotating Disk Electrode", M.R.H. Hill and G.T. Rogers, J. ELECTROANAL. CHEM., 86 (1978) 179-188					
	19.		"Studies of Copper Deposition for High Aspect Ratio Printed Circuit Boards", M. Goodenough and K.J. Whitlaw, M. Goodenough and K.J. Whitlaw Trans. Inst. 1989, 67, 57, pp. 57-62					

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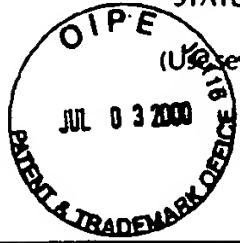
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H	20.	5 051 154	9/91	Bernards et al.			
	21.	5 151 170	9/92	Montgomery et al.			
	22.	5 266 212	11/93	Szotek			
	23.	5 328 589	7/94	Martin			
	24.	5 403 465	4/95	Apperson et al.			
	25.	5 630 950	5/97	Cangelosi			
	26.	5 730 854	3/98	Martin			
	27.	5 750 018	5/98	Brasch			

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

H	28.		"Effects of Polyethylene Glycol on the Electrochemical Characteristics of Copper Cathodes in an Acid Copper Medium", J.D. Reid and A.P. David, PLATING AND SURFACE FINISHING, January 87, pp. 66-70					
	29.		"Damascene Copper Electroplating for Chip Interconnections", by P.C. Andricacos, C. Uzoh, J. O. Dukovic, J. Horkans, H. Deligianni, IBM J. RES. DEVELOP., Vol. 42, No. 5, September 1998					
	30.		"Additive Components: Overall Adsorption Behavior", presented by J. Reid, Novellus Systems, UC Berkeley Extension, June 8-10, 1998					

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DA IF APPROPRI
tt	A	3,615,736	October 26, 1971	F. E. Stone	106	1	January 6, 1969
	B	4,004,956	January 25, 1977	F. A. Brindisi, Jr.	1516	666	August 14, 1972
	C	4,304,646	December 8, 1988	C. I. Courduvelis	204	130	October 27, 1988
	D	5,733,429	March 31, 1998	Martin et al.	205	77	September 10, 1998

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5/18/03

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